

Amendment to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) A communications system for mobile radio telephony the system comprising:

a plurality of mobile devices operable within a total territory of the communication system, the total territory being divided into a plurality of location areas,

each mobile device comprising a module insertable into, removable from and distinct from the mobile device,

each mobile device being associated with at least one subscriber territory being fixed inside the total territory,

wherein the at least one subscriber territory includes at least a portion of at least one location area from among the plurality of location areas **and**

wherein said at least one subscriber territory is fixed by data including a location and the radius of a circle surrounding the location as a center, and

wherein each module comprises a processor configured to determine whether a respective mobile device is located inside the at least one subscriber territory by checking whether the received coordinates of the at least one location area in which the mobile device is located falls into the at least one subscriber territory associated with the mobile device, wherein said checking step comprises:

comparing a received location area/cell (LAC/CI) identifier with pre-stored LAC/CI identifiers to determine whether the received LAC/CI identifier is in the range of the pre-stored LAC/CI identifiers, and

determining if the received LAC/CI identifier matches one of the pre-stored LAC/CI identifiers, in the case where it is determined that the received LAC/CI identifier is in the range of the pre-stored LAC/CI identifiers.

wherein said pre-stored LAC/CI identifiers are stored in a memory on the subscriber identity module (SIM)

-comparing received coordinates of the at least one location area in which the mobile device is located, which includes a location point defined by coordinates X_{h-area}, Y_{h-area} with stored coordinates of the at least one subscriber territory including a location point defined by coordinates $X_{h-territory}, Y_{h-territory}$ and a radius $R_{h-territory}$ that fixes a circle around the location point, and

wherein said stored coordinates are stored in a memory on the SIM module.

2. (Previously Presented) A communications system in accordance with claim 1, wherein the module is the subscriber identification module.

3. (Previously Presented) A communications system in accordance with claim 1, wherein location areas in which one or more radio cells are located are arranged in the total territory covered by the communications system.

4. (Previously Presented) A communications system in accordance with claim 3, wherein location areas and/or the radio cells have identity data characterizing them.

5. (Original) A communications system in accordance with claim 4, wherein the identity data include identifiers and coordinates.

6. (Previously Presented) A communications system in accordance with claim 4 further comprising means for transmitting the identity data of the location areas and/or of the radio cells to the mobile devices.
7. (Previously Presented) A communications system in accordance with claim 4, wherein an interface is provided in the mobile devices by means of which the identity data can be transmitted to the module.
8. (Previously Presented) A communications system in accordance with claim 1, wherein means are provided in the module by means of which the identity data of the location area or radio cell in which the mobile device is located can be compared with data characterizing the subscriber territory.
9. (Original) A communications system in accordance with claim 8, wherein the data characterizing the subscriber territory include identifiers and coordinates of the locations areas and/or radio cells located in the subscriber territory.
10. (Previously Presented) A communications system in accordance with claim 8, wherein the data characterizing the subscriber territory are stored in the module.
11. (Previously Presented) A communications system in accordance with claim 9, wherein the module is effective to determine whether the coordinates of a location area or of a radio cell of the communications system are disposed in a region which is fixed by a location and the radius of a circle surrounding the location as a center.

12. (Previously Presented) A communications system in accordance with claim 11, wherein the coordinates of the location and the radius are stored in the module.
13. (Previously Presented) A communications system in accordance with claim 11, wherein the identifiers of the location areas and/or of the radio cells identify the corresponding coordinates of the location area and/or of the radio cell to which they apply to facilitate a determination of the coordinates from the identifiers.
14. (Previously Presented) A communications system in accordance with claim 13, wherein the identifiers of the location areas and/or of the radio cells are designated such that they are in a relationship with the coordinates of the location area and/or of the radio cell so that the coordinates can be determined from the identifiers.
15. (Previously Presented) A communications system in accordance with claim 9, wherein means are provided in the module by which the coordinates can be determined on the basis of the identifiers.
16. (Previously Presented) A communications system in accordance with claim 15, wherein the module has means by which it can be determined whether the identifier of a location area and/or of a radio cell coincides with a predetermined identifier of the location area and/or of the radio cell of the subscriber territory.

17. (Previously Presented) A communications system in accordance with claim 16, wherein the predetermined identifier is stored in the module.
18. (Previously Presented) A communications system in accordance with claim 1, wherein the identifiers stored in the module are at least partly stored in a form reducing the storage requirements.
19. (Previously Presented) A communications system in accordance with claim 1, wherein the system further comprises an interface between the mobile device and the module to facilitate the transmission of a control signal indicating whether the mobile device is located in a subscriber territory.
20. (Currently Amended) A communication system in accordance with claim 1, the system configured to perform a method of operating a communications system for mobile radio telephony, the communication system being divided into a plurality of location areas, each location area including at least one radio cell, the method comprising:

determining whether a respective mobile device is located inside the at least one subscriber territory by checking whether the received coordinates of the at least one location area in which the mobile device is located falls into the at least one subscriber territory associated with the mobile device, wherein said checking step comprises:

comparing a received location area/cell (LAC/CI) identifier with pre-stored LAC/CI identifiers to determine whether the received LAC/CI identifier is in the range of the pre-stored LAC/CI identifiers, and

determining if the received LAC/CI identifier matches one of the pre-stored LAC/CI identifiers, in the case where it is determined that the received LAC/CI identifier is in the range of the pre-stored LAC/CI identifiers,

wherein said pre-stored LAC/CI identifiers are stored in a memory on the subscriber identity module (SIM) assigning at least one subscriber territory to a mobile device, the subscriber

territory being defined according to three parameters, a subscriber X-coordinate position, a subscriber Y-coordinate position and a subscriber radius R, the three parameters collectively defining a circular subscriber territory within a total territory of the communication system;

receiving an X-coordinate position and a Y-coordinate position of one of said location areas or radio cells within the communication system at the mobile device;

determining whether the received X-coordinate position and the received Y-coordinate position of one of said location areas or radio cells is disposed within the subscriber territory as defined by said subscriber X-coordinate position, said subscriber Y-coordinate position and said subscriber radius R; and informing a subscriber of the mobile device that the subscriber is within the subscriber territory in the case where said determining step is true.

21. (Cancelled)

22. (Previously Presented) A method in accordance with claim 20, wherein the examination whether the coordinates of the location area and/or of a radio cell are disposed in the region which is fixed by the location and the radius of the circle surrounding the location as the center is performed by the module.

23. (Previously Presented) A method in accordance with claim 1, wherein an examination whether the identifier of a location area or of a radio cell coincides with a predetermined identifier of a location area or of a radio cell is performed by the module.

24. (Previously Presented) A method in accordance with claim 22, wherein examination whether the identifier of the location area or radio cell coincides with the predetermined identifier takes place prior to the examination whether the coordinates of the location area and/or of a radio cell are disposed in a region which is fixed by the location and the radius of a circle surrounding the location as a center is performed by the module.

25. (Previously Presented) A method in accordance with claim 20, wherein the location and the radius of the region and/or the predetermined identifiers are stored in the module.

26. (Previously Presented) A method in accordance with claim 25, wherein the predetermined identifiers are at least partly stored in a manner reducing the memory requirements in the module.

27. (Cancelled).

28. (Previously Presented) A communication system in accordance with claim 20, wherein the identifier of the location area and/or of the radio cell and/or their coordinates are forwarded by a transmitter and receiver station to the mobile device and from this to the module.

29. (Cancelled)

30. (Previously Presented) The communication system according to claim 20, wherein the assigning step further comprises storing the three parameters within a memory of the mobile device.

31. (Cancelled)

32. (Cancelled)

33. (Currently amended) A method of operating a communications system for mobile radio telephony, the communication system being divided into a plurality of location areas, each location area including at least one radio cell, the method comprising:

determining whether a respective mobile device is located inside the at least one subscriber territory by checking whether the received coordinates of the at least one location area in which the mobile device is located falls into the at least one subscriber territory associated with the mobile device, wherein said determination by checking comprises:

comparing a received location area/cell (LAC/CI) identifier with pre-stored LAC/CI identifiers to determine whether the received LAC/CI identifier is in the range of the pre-stored LAC/CI identifiers, and

determining if the received LAC/CI identifier matches one of the pre-stored LAC/CI identifiers, in the case where it is determined that the received LAC/CI identifier is in the range of the pre-stored LAC/CI identifiers,

wherein said pre-stored LAC/CI identifiers are stored in a memory on the subscriber identity module (SIM)

assigning at least one subscriber territory to a mobile device, the subscriber

territory being defined according to three parameters, a subscriber-X coordinate position, a subscriber-Y coordinate position and a subscriber radius R, the three parameters collectively defining a circular subscriber territory within a total territory of the communication system;

receiving an X-coordinate position and a Y-coordinate position of one of said location areas or radio cells within the communication system at the mobile device;

determining whether the received X-coordinate position and the received Y-coordinate position of one of said location areas or radio cells is disposed within the subscriber territory as defined by said subscriber X-coordinate position, said subscriber Y-coordinate position and said subscriber radius R; and

informing a subscriber of the mobile device that the subscriber is within the subscriber territory in the case where said determining step is true

assigning at least one first identifier to a mobile device defining at least one subscriber territory of the mobile device, wherein the first identifier is characterized by a location area of the communication system or coordinates of a radio cell of the communication system defining a center and by a radius of a circle circumscribing the center location, wherein the center location is defined by coordinates $X_{h\text{-territory}}, Y_{h\text{-territory}}$ of a location point and the circle circumscribing the center location is defined by a radius $R_{h\text{-territory}}$ that fixes a circle around the location point;

receiving, at the mobile device, a second identifier of one of a location area or a radio cell within the communication system defined by received coordinates of the location area LCA or radio cell CI in which the mobile device is located, defined by coordinates $X_{h\text{-area}}, Y_{h\text{-area}}$;

determining, using a module insertable into, removable from, and distinct from the mobile device, whether the first identifier matches the second identifier by checking whether the received coordinates of the at least one location area in which the mobile device is located falls into the at least one subscriber territory associated with the mobile device, wherein said checking step comprises:

comparing received coordinates of the at least one location area in which the mobile device is located, which includes a location point defined by coordinates $X_{h\text{-area}}, Y_{h\text{-area}}$ with stored coordinates of the at least one subscriber territory including a location point defined by coordinates $X_{h\text{-territory}}, Y_{h\text{-territory}}$ and a radius $R_{h\text{-territory}}$ that fixes a circle around the location point, and
informing a subscriber of the mobile device that the subscriber is within the subscriber territory when the first identifier matches the second identifier.

34. (Previously Presented) The method according to claim 33, wherein the assigning step further comprises storing the predetermined identifier within the module of the mobile device.

35. (Cancelled)

36. (Cancelled)

37. (Currently Amended) A communications system for mobile radio telephony the system comprising:

a plurality of mobile devices operable within a total territory of the communication system, the total territory being divided into a plurality of location areas,

each mobile device comprising a module insertable into, removable from and distinct from the mobile device,

each mobile device being associated with at least one subscriber territory being fixed inside the total territory

wherein the at least one subscriber territory includes at least a portion of at least one location area from among the plurality of location areas

~~wherein said at least one subscriber territory is fixed by data including a location and the radius of a circle surrounding the location as a center, and~~

~~wherein each module comprises a processor configured to poll a determination unit external from the mobile device and receive information from the determination unit regarding whether a respective mobile device is located inside the at least one subscriber territory by checking whether a received location area/cell (LAC/CI) identifier the received coordinates of the at least one location area in which the mobile device is located falls into the at least one subscriber territory associated with the mobile device, wherein said checking step comprises:~~

comparing a received location area/cell (LAC/CI) identifier with pre-stored LAC/CI identifiers to determine whether the received LAC/CI identifier is in the range of the pre-stored LAC/CI identifiers, and

determining if the received LAC/CI identifier matches one of the pre-stored LAC/CI identifiers, in the case where it is determined that the received LAC/CI identifier is in the range of the pre-stored LAC/CI identifiers,

wherein said pre-stored LAC/CI identifiers are stored in a memory on the subscriber identity module (SIM)

~~comparing received coordinates of the at least one location area in which the mobile device is located, which includes a location point defined by coordinates X_{h-area}, Y_{h-area} with stored coordinates of the at least one subscriber territory including a location point defined by coordinates $X_{h-territory}, Y_{h-territory}$ and a radius $R_{h-territory}$ that fixes a circle around the location point, and~~

~~wherein said stored coordinates are stored in a memory on the SIM module.~~